SOIL conservation

U. S. Department of Agriculture / Soil Conservation Service / May 1975

From the Administrator

Worth Preserving...and Talking About

Not many days ago, a young man, whose personal memory of the world's events doesn't go back further than the Korean conflict, startled a group of us SCSers with a question.

It was simple enough; it was sincere: Did we have anything tangible to show for our years of work in soil conservation?

One veteran conservationist nearly exploded, and the rest of us weren't at a loss for words. We told him in no uncertain terms what this country looked like 40 years ago when the Soil Conservation Service began. We pointed out that much of our rangeland was desolate; that much soil of the South had been written off as a total loss; that much of our wheat and grazing land today was lumped into a vast area called the Dust Bowl, where the principal agricultural activity of the 1930's was the foreclosure sale.

We contrasted this dismal picture of the past with the much improved picture of the present, and explained that despite some critical problems today, that there is really no comparison between the look of the land of 1935 and 1975.

The young man, astonished by the fervor of our response to his question, said only, "I didn't know that."

As we approach the 200th anniversary of our Declaration of Independence, SCS employees and district personnel might take heed of the young man's innocent question and set about documenting some local history.

Gather up old photographs while you can. Tape interviews with the SCSers and farmers and ranchers who were operating in 1935. And conservation districts, whose formation was termed "one of the most important movements in the history of agriculture" by the late Hugh Hammond Bennett, first chief of SCS, should consider appointing an historian, if they have not already done so. Youth boards, or local high school or college history students, might also want to make the local history of soil and water conservation a class project during 1976. And perhaps libraries can be talked into keeping a permanent historical file or shelf or scrapbook of local conservation history.

For our part, the Soil Conservation Service is putting together a Bicentennial slide presentation on the development of the conservation idea in America during the last 200 years. It will be available to SCS and district offices in 1976 in helping to tell our story, particularly to those growing legions of people who don't recall the thirties.

Let's all take advantage of the forthcoming American Revolution Bicentennial celebration to help answer that young man's question for as many Americans as possible.

Kenneth E. Grant

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Earl L. Butz
Secretary of Agriculture

Kenneth E. Grant, Administrator
Soil Conservation Service

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COVER: Visitors to the exhibit farm at Round Hill in Allegheny County, Pennsylvania, share the excitement and energy of the farm's flock of Suffolk sheep being let out to pasture in mid-April. (See story on page 12.)

Block Island, off the coast of Rhode Island, is the site for one of the more unique journeys by SCS in providing conservation technical assistance.

Ferrying to Work

by Gordon S. Smith

Information specialist, Northeast Technical Service Center, SCS, Upper Darby, Pennsylvania

It's been more than 300 years since a Dutchman named Adrian Block sailed around a 6,900-acre, porkchop-shaped island and named it after himself.

Today, that island—10 miles off Point Judith in Rhode Island—is the site for a 2-day annual visit by the Soil Conservation Service to provide conservation technical assistance to the islanders. The trip is one of the more unusual ones by SCS—beginning by ferry from Point Judith.

Last year, Robert E. Lee, SCS soil conservationist for southern Rhode Island, was accompanied to the island by John Hannah, county agent for the Extension Service. The two offered a unique natural resource service to the islanders.

"Using this two-man team approach, we felt we could assist Block Islanders with most any resource problem they have," Lee said.

"As the SCS representative, I handle land, water, wildlife, conservation engineering, and vegetative problems.

"John Hannah tackles such things as plant diseases, growing fruit and vegetables, landscaping yards, and group education activities. He is, in effect, an extended arm of the University of Rhode Island with access to numerous excellent research facilities."

Block Island, settled in 1661 by a small group of Englishmen who came over from what is now Rhode Island to make peace with the native Indians, has experienced great changes in land use over the years.

Commercial fishing and farming were once the mainstays but today only two fishing operations and one dairy farm remain. The fishing resource was depleted, and much of the limited farmland was divided and subdivided with each passing generation until farms were too small to cultivate on a profitable basis. Spiraling shipping costs to the mainland helped put an end to serious farming. About all that remains in agriculture are the numerous small vegetable and flower gardens that dot the rolling landscape. Much of the former farmland is now being developed for vacation homes.

Gearing up for their visit to Block Island, Lee and Hannah first sent a news release to the *Block Island Times* announcing the dates they would be on hand and their hotel phone number for previsit messages.

Hannah gathered Extension Service publications that might be helpful to the islanders. Lee assembled the conservation plans for 13 district cooperators on the island and a list of islanders who had called or written him in recent months. In spite of the nonfarming situation now on the island, residents show considerable interest in good protection of their natural resources, Lee reports.

Loading up their gear and information materials, the two caught the early ferry and were on Block Island before lunchtime.

The first order of business was answering the phone messages received at the hotel prior to arrival. Some of these problems were answered with a phone call. Others required an onsite visit with a landowner. By early afternoon the men were headed out to visit landowners.

The initial stop was at the town hall to see First Warden Herbert Whitman, the island's top elected official.

There, Lee and Hannah were updated on island resource problems: what to do about elm trees being killed by the blight; a need for better information on the best trees, shrubs, and grasses to plant in the salty environment; how to establish protective cover along the shifting and eroding shoreline.

One of the major problems on the island is a familiar one also on the mainland: inadequate sewage disposal. Tourism has become the big industry on the island and has overtaxed hotel and restaurant septic systems to such a degree that it threatens to close businesses in New Shoreham, the island's only town. Plans are underway for a new sewage system, and SCS has provided soils information.

Continuing on their way, Lee and Hannah found John Littlefield on a highway repair job. Littlefield, the island's highway superintendent, is also a part-time farmer and a district

John T. Hannah and Robert E. Lee check kudzu plants which have stabilized the steep banks on the property of Islander John Gray.

cooperator. The chance meeting provided an opportunity for Littlefield to gain information about plants to reduce road-bank maintenance costs and wildlife plants to attract game on his farm.

The Reverend W. Stanley Pratt, pastor of the First Baptist Church, and his wife Winifred were next on the team's list. They operate the Red Shutters shop on the island and sell honey, homemade candles, and unique souvenirs. Their prime resource problem was controlling plant pests and diseases without creating a hazard for their extensive beehives.

At another stop, Lee talked with John Gray, whom he has worked with for several years to slow the natural process that chews at the 150-foot picturesque cliffs near Gray's home. Gray, a real estate agent on the island, moved his house back from the cliffs several years ago but is still anxious about the continuing erosion problem. Lee had recommended Japanese black pine, autumn olive, kudzu, and other plants to help hold the soil in place. He noted on this trip that the plantings had slowed the process, especially in the deep gullies that were eating back inland.

A bit later, the two visited Mrs. Margaret C. Self, editor of the *Block Island Times*, and discussed news related to conservation.

By late afternoon on the second day, Lee and Hannah had contacted most of the Block Islanders on their lists. With a number of gratifying comments about the help they had furnished and thanks for the time they spent on the island, they boarded the ferry for Point Judith and headed for home, satisfied that their somewhat unusual, challenging, and interesting assignment had been a success. ♦

Gene Jenn harvests potatoes on his farm in Alaska with Kachemak Bay and glaciers in the background.

Spuds in Alaska

by James E. Preston

District conservationist, SCS, Homer, Alaska

Alaska potatoes?

They're "in" on the Kenai Peninsula, along with fish, minerals, oil, and recreation.

Former construction worker Gene Jenn harvested 20 tons per acre last year, aided by an unusually warm season and a heavy application of fertilizer.

Jenn, a director for the Alaska Association of Soil Conservation Subdistricts and past supervisor for the Homer Soil Conservation Subdistrict, came to the Homer area 8 years ago to do construction work.

Although he didn't realize it at the time, he had bought 5 acres of some of the best agricultural land in the area —Beluga silt loam. Only about 7,000 acres of this soil are available for agricultural uses in the Homer area, about one quarter of it having been subdivided.

Shortly after Jenn arrived, he left construction work, built a greenhouse, and began farming. This year, he's shipped about 10 tons of potatoes to Kodiak Island and is selling the rest to a distributor on the Kenai Peninsula.

It takes about 3 years to get Beluga silt loam into top agricultural production. The natural heavy cover of bluejoint, firewood, and alder is difficult to incorporate into the soil. ♦

'Dove' Proso Millet-- 'Strictly for the Birds'

by John D. Powell, E. R. Beaty, H. J. Haynsworth, and W. C. Young

Superintendent, Americus Plant Materials Center,
SCS-University of Georgia, Americus, Georgia;
professor of agronomy, University of Georgia, Athens, Georgia;
plant materials specialist, SCS, Athens, Georgia;
and former plant materials specialist, SCS, Fort Worth, Texas, now retired

A new crop—'Dove' proso millet—is "strictly for the birds" and is so popular that demand for seed exceeds supply.

Released last year as a wildlife food planting by the Soil Conservation Service and the University of Georgia Agricultural Experiment Stations, 'Dove' proso millet, *Panicum miliaceum* L., is the first proso millet to grow well in the southern United States.

A need had existed or a proso millet that could produce a heavy seed crop in the southern states to attract game birds, particularly doves. From a number of domestic strains and more than 30 plant introductions, 'Dove' proso millet—an accession from India—was selected as the best during studies that began in 1961.

Collected by the Agricultural Research Service as plant introduction No. 196292, *Panicum miliaceum* L. showed more growth, more rapid development, and higher grain yield than the other plants studied by SCS and the University of Georgia Agricultural Experiment Stations.

It matures in 70 to 80 days and thus can be timed to mature at selected periods in the summer and fall, such as hunting season. At trial plantings in soil and water conservation districts in the Southeast, it has proved highly successful in attracting doves, hence its name.

Seed was increased at SCS's Americus Plant Materials Center and distributed first for testing and later for commercial seed production in soil and water conservation districts, primarily in Georgia, the Carolinas, and Alabama.

In general, 'Dove' proso millet is easily grown, dependable, high yielding, free from disease and pests, and easily harvested by direct combining. Best results have been attained on well-drained soils that have been well prepared and properly fertilized. At maturity, the plant can reach 4 to 6 feet on fertile sites.

A summer annual, 'Dove' proso millet puts forth new shoots at the crown like cereal grains. Vegetation is stemmy rather than leafy, and the leaves are narrow, drooping, and pale yellow-green on comparatively heavy stems.

The seed, produced in a loose, drooping seedhead, are smooth and the color of light straw. They number 48,000 per pound. ♦

W. J. Reed(left) inspects 'Dove' proso millet on his farm in Castleberry, Alabama.

Jack Schuster, who signed one of the Nation's first Great Plains Conservation Program contracts, discusses an irrigated cover crop with Charles D. Ball, SCS conservation technician, now retired. The rye, growing on cotton land, furnishes winter and spring grasses.

Eighteen years later...

A Look at One of the First GPCP Contracts

by Dale D. Allen
Information officer, SCS, Temple, Texas

One of the Nation's first Great Plains Conservation Program (GPCP) contracts was signed at Muleshoe, Texas, on December 20, 1957, by H. E. Schuster and his son Jack.

Today, nearly 18 years later, the way the farm is tied down is silent proof of the effectiveness of the program.

Last year, right after the worst windstorm in 6 years had raked the area in West Texas, Jack Schuster noted that his land had blown very little.

"We caught a lot of sand from some adjoining farms, but our land took the wind with little trouble," he said.

"Before we went into our GPCP contract, at least half our land would have blown during a storm like we had last week. In fact, similar storms in the early 1950's blocked the driveway to our house several times; even the county road was blocked a few times."

That week, however, fat cattle were grazing an irrigated winter cover crop planted on cotton land late the summer before for soil protection.

A dryland cotton field was also protected by a rye cover crop. A severe drought gripped the area, so the rye was in critical condition; yet it was holding the sandy soil in place.

Jack has operated the farm in partnership with his mother since his father died. His father was a director of the Blackwater Valley Soil and Water Conservation District when the GPCP contract was signed.

A native of West Texas,

Schuster remembers the Dust Bowl days.

"I recall watching those fronts move in from the north and northwest during the 1930's," he said. "It might be perfectly clear here at home, but you could see those giant clouds of dust rolling in. They must have been several miles high. The front would come in, then the dust would blot out the sun making the day dark as night. We lit the lamps many times during midday."

Starting in 1957, with GPCP help, the Schusters applied a complete conservation program in 4 years to their 1,313-acre farm. Major practices included grass planting, grassland improvement measures, a conservation cropping system, stripcropping, and major overhaul of their water-wasting irrigation system.

"We had been wanting to change our open main irrigation ditches to underground pipe for several years to save water as well as labor," Schuster said. "But frankly, we couldn't afford it."

"We had always row-irrigated out of open ditches. On this sandy land, the main ditches wasted lots of water. We would drown part of our crops while other areas were not getting enough water. After installing underground pipe, we began irrigating with sprinklers. As we learned later, sprinklers are the only efficient way to irrigate this land without wasting massive amounts of water."

The Schusters were irrigating fewer than 300 acres when they entered into the GPCP contract. After installing the underground pipe and sprinklers, they immediately began to irrigate more land but with less water.

"Under GPCP, we learned to take a little water and to do a lot with it. Where we had been irrigating slightly less than 300 acres poorly, we immediately were able to irrigate 500 acres efficiently. Yields jumped, but overall water use dropped. This program started the most amazing irrigation education program out here that you ever saw."

He said farmers who never heard of GPCP are benefiting from this technical advance because the system taught by GPCP is now common throughout the sandyland section of the Plains.

Before 1957, Schuster said it took four men to irrigate 300 acres; after installing the GPCP pipeline and accompanying non-GPCP cost-shared sprinklers, the same four men were able to irrigate 500 acres on the farm.

Schuster also learned to grow irrigated grazing crops for livestock after switching to sprinkler irrigation. He now buys stocker cattle to graze during the winter months on his cover crops, then sells them when it's time to plant cotton or grain sorghum.

GPCP also taught area farmers how to properly manage crop residues, how to establish several new range and pasture grasses, and how to manage grassland.

It is also largely responsible for development of parallel terracing techniques, a system whereby terraces are built an even number of rows apart. Terraces are parallel from end-to-end and can be spaced to accommodate 4, 6, or 8-row equipment. Although more expensive than other terrace systems, parallel terraces have now become the standard terrace in the Southwest.

Schuster said the program had benefited the entire Nation, not just the Plains region. He pointed to increased agricultural productivity, technological advances promoted by GPCP, and conservation of land and water resources.

"The problem with GPCP is that it will be needed more in the next 15 years than in the last 15," Schuster said. "Here where I live, we will be running out of irrigation water in about 15 years. If people don't learn how to dryland farm these sandy soils so they won't blow, watch out. Farmers don't like people telling them what to do, but with a well-run cost-share program, you can sell a lot of new ideas in a hurry." ♦

Who's First?

There's still a bit of mystery over who signed the first Great Plains Conservation Program contract.

Eleven contracts were signed in the first month of the program—December 1957—on 15,424 acres in Texas, New Mexico, Kansas, and North Dakota.

The first three GPCP contracts were signed on Thursday, December 19, 1957, by Berthold Sackman in Streeter, North Dakota—a 3-year contract on 1,280 acres; Walter L. Woods in Seminole, Texas—a 3-year contract on 160 acres; and Robert H. Hunt, also of Seminole—a 3-year contract on 160 acres. On Friday, a fourth contract was signed by H. E. Schuster and his son in Muleshoe, Texas.

'Neighborly' Windbreak

by Martin C. Lund

District conservationist, SCS, Grand Forks, North Dakota

An 800-foot windbreak is making life more interesting and comfortable for property owners in a cluster of country homes south of Grand Forks, North Dakota.

Skirting eight 100-foot lots, the dense four-row windbreak tames the wind, adds beauty and privacy to the area, and provides a haven for a variety of small birds and animals.

The windbreak began 17 years ago and set a pattern of neighborly cooperation, according to Henry Ellertson, who bought the first lot.

"I wanted to get out of the city and return to rural living," said Ellertson.

"At that time there was no protection from the northwest or west winds—only open fields. Several other individuals who bought adjacent lots felt we should get together and plant a windbreak.

Mrs. Lloyd Canute spearheaded negotiations and talked with Soil Conservation Service personnel. The planting plan was worked out at a meeting of the eight lot owners.

The site was summer fallowed in 1958 and the trees were planted by the Eastern Grand Forks County Soil Conservation District in 1959. The farmer who had sold the land for the lots did the cultivating, and each lot owner agreed to keep the weeds out of the rows.

Plant species were chosen for beauty and other values in addition to their "wind breaking" capacity—green ash, caragana, honeysuckle, and cotoneaster. Plants in the inside rows are slow growing to prevent interference with the powerline that goes across the back of the lots.

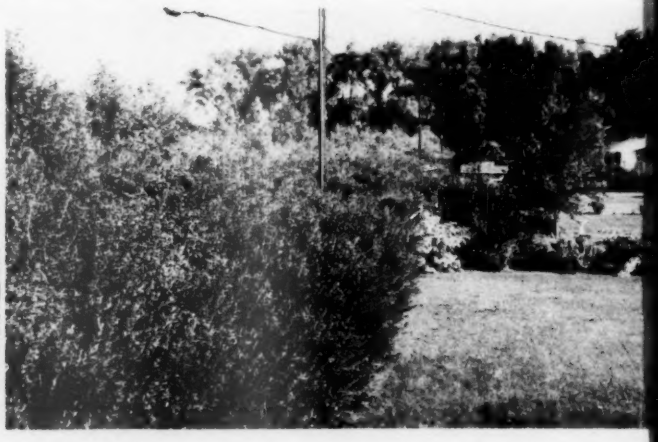
Now, after 16 years of growth, the windbreak gives adequate protection from winter storms and softens summer breezes. But there are other rewards.

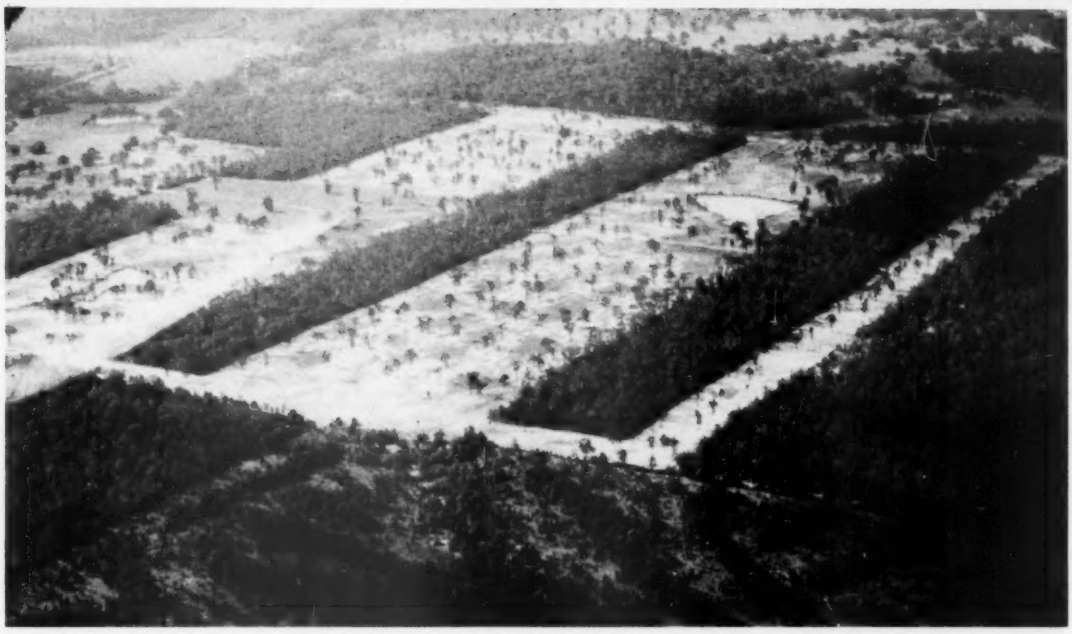
"It has added $2,000 in value to my country home," claimed Ellertson, "and you should see the number of birds that use the trees for shelter and nesting."

Another homeowner who takes pleasure in having the windbreak is Mrs. Edna Raketti.

"I have installed some birdbaths and a bird feeding station," she said. "My brother lives in a rural development without tree protection. When he visits me he always comments on the number of birds singing in the trees during the early morning hours." ♦

Eight neighbors went together and shared in the cost and maintenance of this windbreak near Grand Forks, North Dakota. At left, the author discusses its care and maintenance with Mrs. Edna Raketti just a few years after it was planted. At right, the windbreak as it looked 10 years after planting.





Brushing Up on Wildlife

Managing brush to maintain or benefit wildlife while increasing forage for livestock is big business in Texas. SCS biologists and range conservationists in Texas developed the brush pattern technique in the mid-1960's and it's now being used on nearly 7.7 million acres in Texas. Brush pattern techniques vary, but consist of alternating strips of brush and forage in carefully designed patterns to provide food and cover for wildlife. Alternating strips are cleared or thinned so choice livestock forage plants can thrive without undue competition from the brush for sunlight and moisture.

Among the estimated 26,000 land users in Texas managing brush for both wildlife and livestock is H. H. Moore of Navasota, Texas. Moore has controlled oak brush in a 500-acre pasture in strips, as shown in the photograph above. The cleared areas are 500 to 600 feet wide and planted to Selection 75 kleingrass. Moore now has strips of lush pasture alternating with 300-foot wide strips of dense brush. "As a result, I'm growing some top quality forage, but at the same time I am maintaining a large population of deer and other wildlife," Moore said.

Moore's pasture had previously been so densely infested with brush—including post oak, yaupon, winged elm, greenbriar, and Spanish mulberry—that it produced little livestock forage. It did, however, provide cover for a large deer herd, and Moore wanted to leave enough brush for the herd while improving livestock forage.

The Soil Conservation Service at Bryan provided technical assistance through the Brazos-Robertson Soil and Water Conservation District and helped Moore mark out the strips.—Curtis C. Cox, soil conservationist, SCS, Bryan, Texas. ♦

Above, strips of brush alternate with areas cleared and planted to improved grasses on a 500-acre pasture of H. H. Moore in Navasota, Texas. Below, SCSer David H. Beyer looks at a planting of Selection 75 kleingrass in Moore's pasture.

Round Hill: An Exhibit Farm At Work

by Joseph B. C. White
Superintendent, Bureau of Conservation, Allegheny County. Department of Parks, Recreation, and Conservation, Pittsburgh, Pennsylvania

Round Hill Farm in Allegheny County, Pennsylvania, is a part of a park. In reality it is a vestige of a county and region that was largely agricultural a century ago. Now flooded with industry, urban sprawl from metropolitan Pittsburgh, and a complete turnover in the economic pattern, Allegheny County has fewer than 400 farms. In a few more years there will be none.

The role of Round Hill Exhibit Farm becomes increasingly important: teach the thousands of visitors the importance of agriculture and illustrate the ties that bind all men to the land for basic existence.

Conceived during the development of the county's regional park system in the late 1950's, Round Hill Farm has become a favorite sightseeing and educational center for thousands of persons of all ages.

The park offers a dual advantage of recreation in the 1,100-acre site plus the feature of an operating farm, the only one of its kind open to the public without charge in Pennsylvania. Its attraction for adults is strong in nostalgic recollections of childhood experiences on a family farm. For children, Round Hill offers the opportunity to see and experience the fascinating scenes that are part of everyday life on a farm.

Here they can see a whole range of farm animals, tractors and equipment, planting and harvesting operations, and basic soil and water conservation practices.

All cropland is worked under a soil conservation plan developed by the Soil Conservation Service through the Allegheny County Conservation District. This comprehensive plan includes the rehabilitation of land that has been farmed continuously since the Revolutionary War.

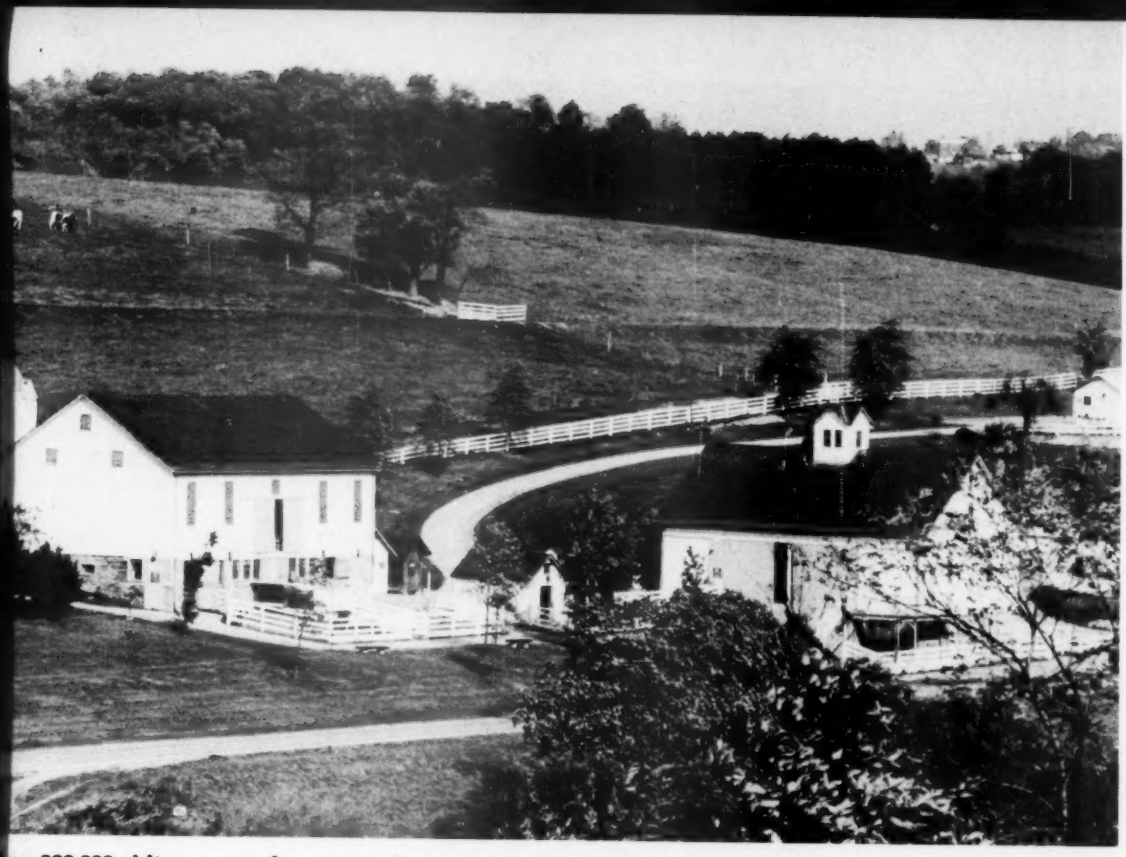
Visitors can see the plan in actuality in diversion terraces, contour planting, stripcropping, crop rotation, pond development, and soil analysis.

While the farm has enjoyed great popularity since it was opened in 1968, this past year was its most active year. More than 300,000 visitors toured the farm during the year in family groups, school classes, and church and other organization groups. Numerous senior citizens groups have spent whole days at the park with a picnic lunch and a tour of the farm included in their day's activities. The small farm continues to flourish under the supervision of the Bureau of Conservation, Allegheny County Department of Parks, Recreation, and Conservation.

Parks Director George E. Kelly said that 1974 was a banner year for many reasons. "We have now developed a series of interesting programs for the farm which have made it increasingly attractive to visitors. In addition, we are using it for educational programs and projects, and we have developed a very fine rapport with all branches of the news media so that our activities are brought to the attention of a large segment of the public. Local television and radio stations, newspapers, magazines, and feature reporters have found the farm to be a refreshing, ever-changing source of human interest stories and newsworthy activities."

Perhaps the most important activity of the year is the guided tour program for school children. Some 45,000 students

Round Hill Farm in Pennsylvania offers m



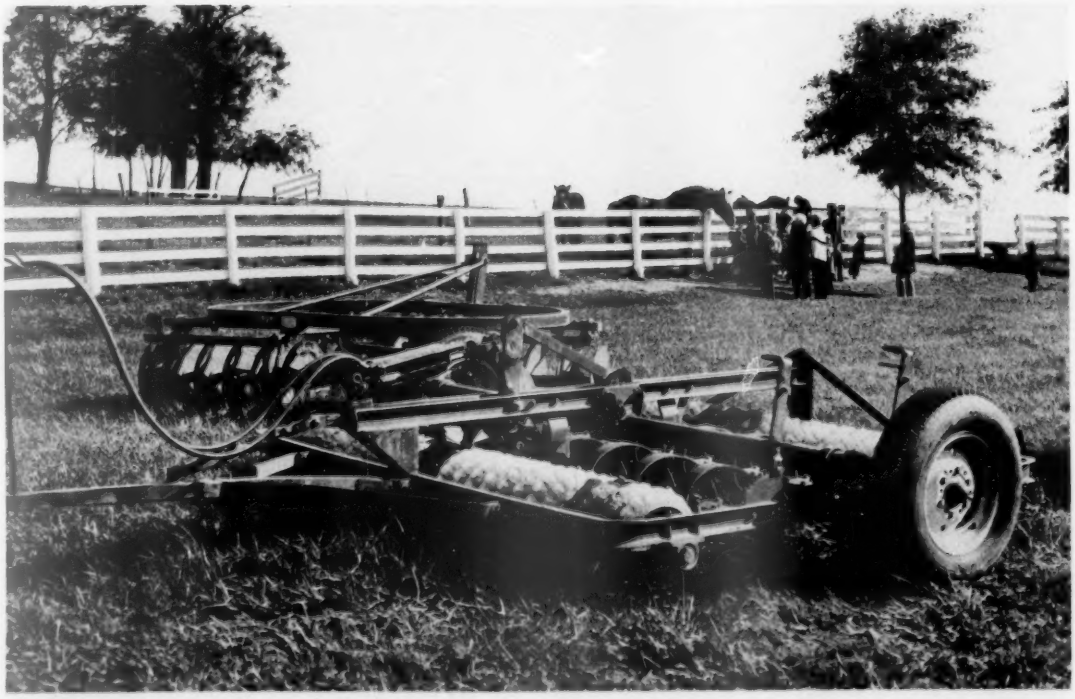
an 300,000 visitors a year the opportunity to see a family-sized farm in operation.

Many blind children get their first chance to "see" farm animals at the exhibit farm.

Farm Manager Bayard K. Miller checks a calf. Breeding schedules are set to provide as many young animals as possible during the peak visiting periods for school children—late spring and early fall.

from Allegheny and surrounding counties toured the farm during the year under the direction of a trained guide staff. In addition to those from local communities, student groups have come from as far away as Somerset, Pennsylvania, Morgantown, West Virginia, and Steubenville, Ohio. The visitors register indicated representatives of 33 states and 11 nations. Several of these were park representatives interested in developing exhibit farms in local or county parks.

Farm equipment is an important part of the farm tour—helping young visitors to realize the cost of operating a farm and the investment the farmer must make.

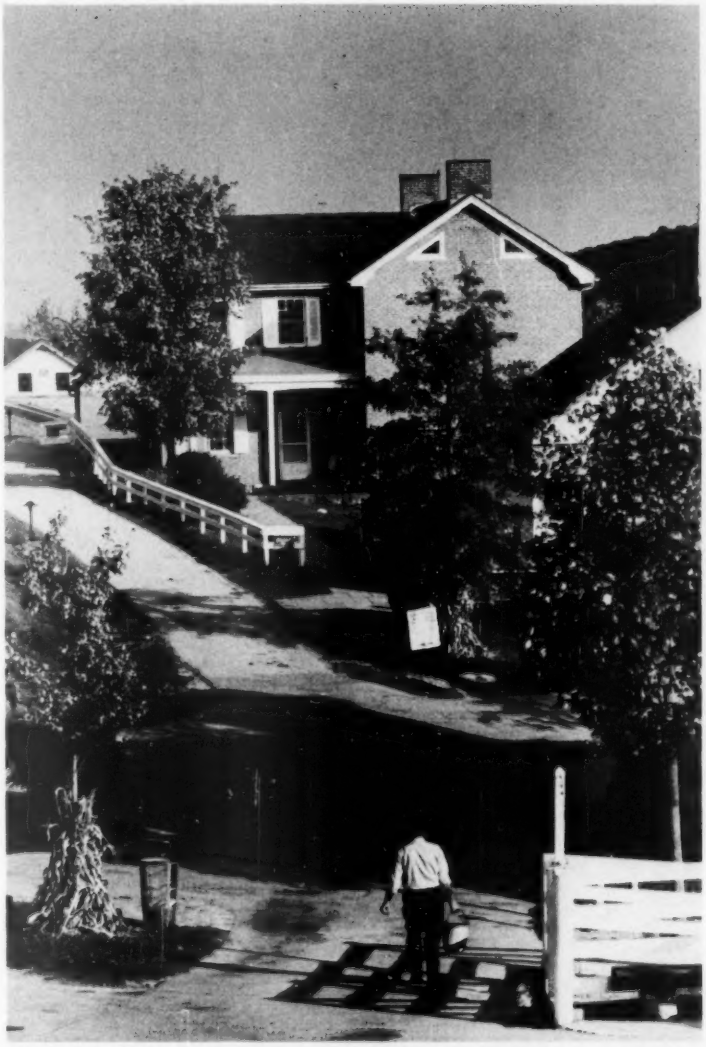


One of the most successful educational projects at the farm has been the "Day on the Farm" experience for elementary school children. In this program last year nearly 300 children from various schools in Allegheny County spent an entire day on the farm engaged in typical farm chores and harvest activities such as making cider, churning butter, husking and shelling corn, baking pies and homemade bread, preparing homemade vegetable soup, and various craft projects.

A number of developments on the farm itself were inaugurated in 1974. Corn, barley, timothy, and other farm crops were planted according to a basic crop rotation plan to provide as much farm-grown livestock feed as possible. A new cereal demonstration area was begun to illustrate the growth of rye, oats, wheat, barley, corn, and soybeans. Since cereals are the basic food of the great majority of humankind, this demonstration area will illustrate the growing process, and according to seasons, the harvesting and preparation of grain for various uses. The vegetable garden, a popular exhibit area, has doubled in size, and tips were given to visitors on planting, growing, and preserving vegetables for home consumption.

The herb garden was enlarged and a drying shed provided for drying the harvested herbs. The herb garden is planted and cared for by the Western Pennsylvania Unit of the Herb Society of America.

Some new livestock was added during the year with the birth of young animals and the purchase of surplus mature animals for market. Livestock sold at auction brought in excess of $3,000 to the county. One beef breed, the Angus, was introduced this year and two Holstein cows were added to the dairy herd. The purpose of the additions was to give visitors the opportunity to see different breeds and to provide descriptive information on their particular characteristics.



The farmhouse at Round Hill was built in 1838 and is now the farm headquarters. It will become a mid-19th century farmhouse museum when a new visitors center is completed.

During 1975 construction will begin on a new farm visitor center. Designed to duplicate existing farm buildings, the new center will include assembly rooms, exhibit and demonstrations areas, classrooms, and a replica of a one-room schoolhouse which once stood on the corner of the farm.

This new facility will allow the full development of all-weather programs scaled to the school year and incorporating

a wide range of community programs for 4-H, Grange, Future Farmers, and other groups of all ages.

Programs in gardening, orchard improvements, wool processing, experimental livestock feeding, and farm economics are planned for public presentation.

The "Day at the Farm" program will be expanded with the center's new kitchen and classroom space, extending this "hands on" experience to teachers, student teachers, and adult groups.

Upon completion the center will also serve as the farm office, allowing the present office in the original brick farmhouse (circa 1838) to be removed. Thus the farmhouse could be developed as a museum of early American farm life with period furnishings proper to allow public visitation.

The basic interpretive theme of the farm illustrates an "energy factory" in which the raw materials of sun, soil, rain, air, and minerals create the miracle of growth. Until the young citizens of America learn the lesson of this miracle and its limits, the earth that supports all life-systems will continue to suffer and decline in quality.

Round Hill Farm's role will grow in scope and significance with more programs reaching more future citizens. In an increasingly urban county, this special park will provide a living link with the history of agriculture, a demonstration of a vanishing way of life, and an opportunity to learn why and how we must husband our earth with great care. ♦

SCS Holds Workshop in Texas For Minority Contractors

The Soil Conservation Service state office in Temple, Texas, recently held its second workshop for minority and disadvantaged contractors in cooperation with the Small Business Administration.

The meeting was designed to inform minority and disadvantaged contractors of vegetative and construction contracts available through SCS-related work. The Small Business Administration, U.S. Department of Commerce, helps small contractors qualify for such contracts.

In addition to prospective contractors from various parts of Texas, the meeting was attended by members of the Coalition Group, San Antonio; the Urban League, Dallas; and the Office of Minority Business Enterprise, Austin. Representatives of the Veterans Administration in Temple also explained contracts available through their agency.

Working closely with the Small Business Administration under Section 8(a) of the Small Business Act, Maurice W. McNeese, head of administrative services at the SCS state office, said that three contractors were presently doing work for SCS under this program.

'Conservation Farming Is the Best Therapy We Have Found'

by John Badger and Dick Barber

Soil conservationist and information officer, SCS, Albuquerque, New Mexico

He came to Rio Arriba County, New Mexico, from Munich, Germany. He brought with him 35 years of experience in social work. North of Espanola, in the vicinity of Alcalde, he founded Santa Maria El Mirador, a home for mentally handicapped young men.

The man is Rev. Dom Cyrillos, the only monk in the United States of the Orthodox Order of the Knights Templar, which has its main house in Munich, Germany. From a meager beginning in 1968, his venture has grown into a 224-acre farm.

El Mirador is dedicated to the rehabilitation of human lives. One means toward this objective at El Mirador is helping and guiding young men to perform normal farm tasks. A secondary objective is to make the home completely self-sufficient. Through an agreement with the

East Rio Arriba Natural Resource Conservation District, the Soil Conservation Service helped Father Cyrillos develop a conservation plan for the farm.

The plan includes a conservation cropping system to produce organically grown grain and other food products for use at the home. Plans are underway to improve irrigation systems. Irrigation water will be applied at proper intervals and in the right amounts to meet the needs of the soil and the crops being grown. With these techniques, Father Cyrillos has caused his once low producing land to produce bountifully. He hopes his success is great enough to serve as an example to other farmers in the vicinity.

But the farm serves yet another purpose.

A young man plants a seed and watches it grow. He cultivates, waters, and cares for it. The young man harvests the fruit. He grinds the grain, making it into flour or meal.

Others plant a pasture. They water and care for grasses and legumes which spring forth. Cows graze the pastures under the care and management of the boys.

Still others milk the cows. And there is sustenance for their physical needs.

But physical sustenance is only a byproduct of Santa Maria El Mirador. The real sustenance is expressed by Father Cyrillos:

"The boys are acquiring their own human dignity and a sense of well-being. Through their learning and work, they are realizing the real meaning of accomplishment. These attitudes do not come from traditionally operated programs for the retarded.

"Everything that is done on the farm is approached from a conservation standpoint," says Father Cyrillos.

Father Cyrillos provides instruction at one of the greenhouses at El Mirador.

"Even before we learned there was a conservation district, we tried to practice conservation and we did a pretty good job of growing our gardens.

"We're interested in wildlife, too. We have a wildlife habitat planting planned for this summer. We will plant and care for it as an experimental test plot. We expect this to bring in more birds and small animals. We're sure this will benefit our farm and we know it will be good for the boys.

"We have plans to build a new house. We plan to develop a vineyard and to produce cheese on a small scale. Other agricultural products, surplus to our needs, will be sold. Each of the young men in the home will receive a portion of the income. He will later be given the opportunity to voluntarily contribute to a fund to establish other homes. What better goal in life than a second home; a home devoted to conservation and self-sufficiency for those whose mental capacities have been hampered.

"And what better way to do it than by being watchful stewards of the small portion of the good earth that has been entrusted to our care. Conservation farming is the best therapy we have found." ♦

RC&Ds—
Regional Organizations Solve Tough Resource Use Problems

by Dick Lehnert

(Reprinted with permission from the ***Michigan Farmer***, February 1975)

Forty-two of Michigan's 83 counties are now within the boundaries of operating Resource Conservation and Development (RC&D) projects or are thinking about forming one.

What's an RC&D? Despite the fact a lot of people are included within one, they remain hard to define and among more nebulous entities.

The U.S. government, which authorized the creation of RC&D's, has a definition that goes like this: "An RC&D project is a locally initiated and sponsored activity that provides an opportunity for local people in an area to develop the natural and related resources to meet their needs and objectives, improve the economy, and provide a better place to live, work and play."

That definition really doesn't do much to explain why any organization should gain so much support. Perhaps a good description would be, RC&Ds are able to add apples and oranges and get fruit. It lets you add unlike things together and get results.

RC&Ds are a curious combination of people, personalities, proposals, and projects, of institutions and ideas and agencies, who try to work together when normally they might not.

Don McArthur, assistant state conservationist in charge of RC&D programs in Michigan, admits "It's hard to get hold of the RC&D concept."

People who worry less about concepts and definitions and more about progress find that RC&Ds will solve these kinds of problems—when virtually nothing else does.

1. *Regional problems* too hard to get at with other units of government because they cross jurisdictional lines;

2. *"Not my" problems* too hard to get at because no agency agrees the solutions are its responsibility;

3. *Red tape problems* too difficult for people to fight through without help;

4. *Jealousy problems,* those that never get solved because people can't agree on priorities of who should go first. Among other things, RC&D's are trading posts.

At the beginning of 1973, there was one RC&D project in operation in Michigan, the Northwest RC&D. Covering 13 counties in the northwest Lower Peninsula, it is highly regarded nationally as one of the more effective problem solvers and work accomplishers.

In 1973, the Upper Peninsula RC&D project was approved.

Then came Huron Pines, in April last year, covering eight counties in the northwest lower peninsula.

Sauk Trails RC&D, which will cover Van Buren, Berrien, and Cass Counties, is awaiting approval from the U.S. Department of Agriculture.

Don McArthur believes one attraction of the RC&D is they are natural resource oriented. They exist, by law, within the same lines as regional planning and development commissions.

The regional planning and development commissions work with problems of crime, health care, the aging, manpower, transportation, and the railroads. With these problems, constant efforts are needed to keep vigilant fingers in dikes on which the pressure always seems to get stronger.

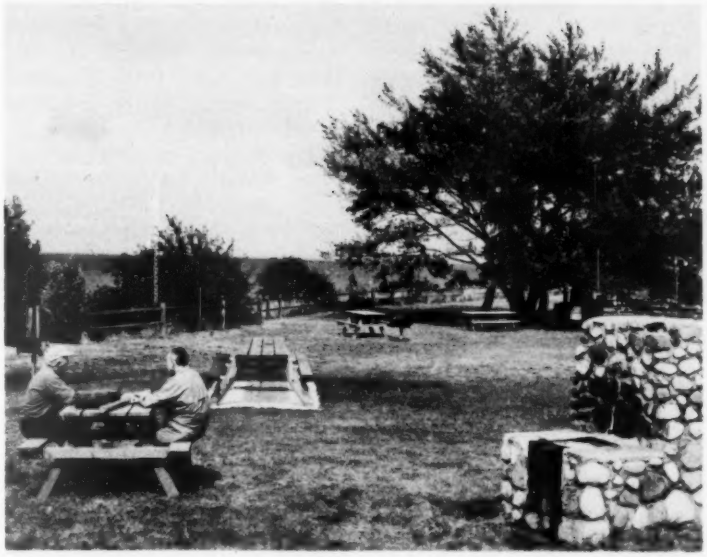
But within the RC&Ds, you can promote an industry, create

a park, or beautify a shoreline, actions with visible and lasting effects.

When Congress created the RC&D program in 1962, it authorized money for technical and financial assistance to legal sponsors. If the money were the most important part, the program might not have flown. Congress allocated only about $25 million last year for the 120 RC&Ds nationally.

Where Congress really scored was in choosing those "legal sponsors." Each RC&D may have many endorsers, but it must have the sponsorship of every soil conservation district and every county board of commissioners within the RC&D. Several other Federal agencies may receive money to assist RC&Ds—the Forest Service, the Soil Conservation Service, Farmers Home Administration, the Cooperative Extension Service.

McArthur said the RC&D program is not a grant program, but matching funds are available for some actions—50 to 100 percent RC&D, completed by local money. Actually, however, Washington counts as "local money" anything that isn't Federal. Some local communities have found money from state agencies, and many times these agencies undertake RC&D actions as if they were their own—as if they were glad to get the tip that



An RC&D water-based recreation measure near Northport, Michigan, includes picnic sites, restrooms, a scenic overlook, and steps to the beach (top photo). Rock riprap and log structures installed through a Northwest Michigan RC&D measure protect the streambank from erosion along the Betsie River (center). A fishing village development in Leland, Michigan, is the work of an RC&D measure in the Leelanau Soil Conservation District (bottom photo).

the problems existed.

"Two-thirds of the value comes from a bunch of local people getting together and working to get something done," McArthur said.

In some cases, the desire to do something was there and people went the RC&D road to do it. In Sauk Trails, for example, the orientation is largely toward farmers.

Farmers there wanted to do something to expand agricultural opportunity. Tally Richards, the Cass County Drain Commissioner, was elected chairman of the RC&D Council, and even before approval as a operating RC&D, the group was laying plans.

There are a lot of grapes in Van Buren and Berrien Counties, Richards said, but there are none in Cass County. With the boom coming in grapes and the French hybrid wine grapes looking good in Michigan, they wondered whether the area's full potential was being used.

So the Sauk Trails first action is a grape site inventory in Cass County.

Similarly, Huron Pines RC&D was motivated by a high priority need. Authorized in April 1974, only 4 months later it let contracts for $56,000 to assist county road commissions in controlling roadside erosion.

In both the Upper Peninsula and the Northwest RC&Ds, however, the orientation was more general, leaning toward forestry and recreation needs. The Northwest RC&D has a national reputation for its water-based recreation work, but it has been into many things—having more than 500 project proposals. Similarly in the Upper Peninsula, forestry improvement gives a major impetus, but hundreds of proposed projects cover every kind of activity—including a buffalo herd improvement project proposed by American Indians of the Keweenaw Bay Tribal Council.

It has been 7 years since the people of northwest Michigan began creating their RC&D. It took almost 2 years after planning began, but in September 1969, the Northwest Michigan Resource Conservation and Development Project officially began.

Last year, it was named as one of the five most effective in the Nation, of 120 in operation, in getting things done.

At the beginning, it took a lot of people working together to get it moving. To get a 13-county RC&D established requires the cooperation of a minimum of 26 county-level groups—not to mention the approval of the Governor, Congress, the U.S. Department of Agriculture, and the Soil Conservation Service.

A good portion of this organization work is done by the project coordinator, and in northwest Michigan he is James R. Callison. He's been with the project since November 1968, when planning got off the ground.

Callison's job, in a nutshell, is to find what people want and help them get it. He finds who has money, know-how, technical ability, and manpower. He tries to get everything to mesh, to make it all work together.

Russell Gingrich, Reed City farmer, is chairman of the Steering Committee of the Northwest RC&D Project. His involvement came through his longtime activity in the Osceola County Soil Conservation District.

"In a lot of our work, many agencies have been coordinated on one action," Gingrich said. Before the RC&D was created, it was hard to get them to work together, he said.

Gingrich feels the RC&D has drawn the people of the northwest together. Experiences, he said, have shown people how interrelated they are.

"A lot of people questioned the value of soil surveys. They thought they benefited only farmers, but once you have the surveys, everybody seems to use them," Gingrich said.

The soil survey example is a good one, not only of how the RC&Ds have been helping peo-

A demonstration of mulching to stabilize roadbanks was sponsored by the Charlevoix County Road Commission and SCS through the Northwest Michigan RC&D Project.

ple get things done, but of the amazing cross fertilization of ideas.

"Initially, a soil survey was authorized for Manistee County," Callison said. "Then we decided to redo Antrim, since the map was old and details had changed since it was last done in 1923."

Using new aerial photos and old information, plus a lot of ground information, people began to see that the more detail that could be added, the more useful the maps would be.

Interpretations of the maps began. One of the first fruits was a book called "Red tart cherry site inventory" for all of Grand Traverse County. It's a book of maps, maybe 50 of them, evaluating the fruit site potential of every square foot of the county. And new ones are being done for other counties.

"I can't help but think, what if our grandfathers had tools like cherry site inventories," Gingrich said. "It sure would have saved a lot of work and heartbreak. We cleared a lot of land here in northwest Michigan that, we now know, we never should have cleared for farming. Now we have this information at our fingertips."

Some of the modern-day applications of soil surveys are in land use planning. For example, cherry trees require high sloping sites. Such sites often overlook water. Such sites also make the best building sites. Planners now have this information to help them when choices must be made.

Soil surveys also help avoid the problems that come when people spend their life savings for a retirement lot on which to build a home—only to find the soil won't deliver an adequate percolation test for the septic tank and drain field.

Gingrich feels the RC&D works well. "Some people who see problems get discouraged," he said. "It takes so long to get things done. They see Federal agencies doing more paper shuffling than anything.

"When we started this project, we asked all areas and communities, townships and counties, and cities, to get proposed actions to us.

"We accepted them all, even some 'crackpot' schemes that had been kicking around for years. Some may never get any action—but some were done with no formal action at all from the RC&D." Sometimes just having a forum to air a problem gets wheels rolling.

"You need total cooperation for these things to work," Gingrich said. He credited Callison with "having a knack to get people to work together."

In the northwest, many of the initial actions fell into the general area of "critical area planting." These projects took place on land that, if it were farmland, would have been eligible for normal erosion control measures in which the farmer and the government would have cost shared.

But in the northwest, much of this land was publicly owned or in private nonfarm hands. Since the actions started, about 1,000 acres of such land per year have been protected: Beaches and dunes have gone into beachgrass; wildlife plantings and shrubs have gone into sandy areas.

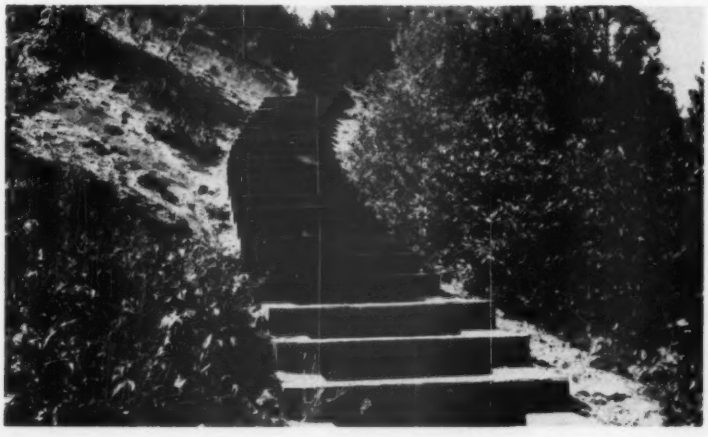
In most of these cases, the machinery was available but never applied to these tasks precisely. There were cooperative actions of soil conservation districts, the Agricultural Stabilization and Conservation Service, the Soil Conservation Service, and private landowners. The State Department of Natural Resources and the U.S. Forest Service also were involved.

Streambank stabilization was given high priority. The Betsie, the Big Sauble, the Hersey, the Cedar, the Pere Marquette, the Big Bear, the Maple—all these rivers are in line or finished with projects designed to increase their recreational value while reducing bank erosion and other damage problems from high usage.

Parks have gone in at Evart, Elk Rapids, Boyne City, and in

(continued on p. 24)

These steps, built as an RC&D measure, lead up from a beach on Lake Michigan to picnic and overlook areas and prevent erosion caused by people climbing or sliding on the steep slope.



Recon . . .

SCSers in Wellsboro, Pennsylvania, were among the more than 225,000 Federal employees recognized in 1974 under the Federal Incentive Awards program. The **Civil Service Journal** notes members of the SCS office there were extremely effective in helping farmers, townspeople, and communities recover from the massive flood damage caused by Hurricane Agnes and shared an award of $1,000 for their outstanding efforts in repair of the flood damage.

Fish farms. The Soil Conservation Service's 1975 summary of fish farming shows acreage in trout, catfish, and minnow farming decreased slightly more than 20 percent compared with the 1974 average. As of March 14, 1975, enterprises involved in commercial production of fish numbered 5,146 and covered nearly 125,000 acres. Catfish farming enterprises numbered 1,934 and covered 46,440 acres plus 1,200 linear feet in raceways; trout farms numbered 663 and covered 1,913 acres plus 15.7 million cubic feet in raceways; and minnow farms numbered 790 and covered 40,255 acres. The number of fee-fishing enterprises was nearly 3,950—about 200 more than last year, but acreage was 42,700—nearly 21,000 fewer acres than in 1974.

Soil surveys

Arkansas

Jackson County. By Warren A. Gore. 1974. Soil Conservation Service in cooperation with Arkansas Agricultural Experiment Station. 74 pp. illus.; maps.

Colorado

Boulder County Area. By Donald C. Moreland and Ronald E. Moreland. 1975. Soil Conservation Service in cooperation with Colorado Agricultural Experiment Station. 86 pp., illus.; maps.

Indiana

Boone County. By Karl H. Langlois, Jr. 1975. Soil Conservation Service in cooperation with Purdue University Agricultural Experiment Station. 56 pp., illus.; maps.

Harrison County. By John M. Robbins, Jr. 1975. Soil Conservation Service in cooperation with Purdue University Agricultural Experiment Station. 78 pp., illus.; maps.

Vigo County. By Robert H. Montgomery. 1974. Soil Conservation Service in cooperation with Purdue University Agricultural Experiment Station. 121 pp., illus.; maps.

Missouri

Lafayette County. By Allan H. Jeffrey. 1975. Soil Conservation Service in cooperation with Missouri Agricultural Experiment Station. 67 pp., illus.; maps.

Montana

Carbon County Area. By John L. Parker, Gordon L. Decker, Laverne Gray, and Oscar Muller. 1975. Soil Conservation Service and Forest Service in cooperation with Montana Agricultural Experiment Station. 137 pp., illus.; maps.

New Mexico

Tucumcari Area. By W. James Ross and Douglas S. Pease. 1974. Soil Conservation Service in cooperation with New Mexico Agricultural Experiment Station. 94 pp., illus.; maps.

Nebraska

Adams County. By Larry G. Ragon. 1974. Soil Conservation Service in cooperation with University of Nebraska Conservation and Survey Division. 78 pp. ,illus.; maps.

Wayne County. By Donald E. Kerl. 1975. Soil Conservation Service in cooperation with University of Nebraska Conservation and Survey Division, 61 pp., illus.; maps.

Meetings

Nevada

Fallon-Fernley Area. By William E. Dollarhide. 1975. Soil Conservation Service in cooperation with University of Nevada Agricultural Experiment Station and United States Department of the Interior, Bureau of Indian Affairs. 112 pp., illus.; maps.

Ohio

Putnam County. By Alec R. Brock and Donald R. Urban. 1974. Soil Conservation Service in cooperation with Ohio Department of Natural Resources and Ohio Agricultural Research and Development Center. 112 pp., illus.; maps.

South Dakota

Hughes County. By Miles W. Smalley. 1975. Soil Conservation Service in cooperation with United States Department of the Interior, Bureau of Indian Affairs and South Dakota Agricultural Experiment Station. 104 pp., illus.; maps.

Texas

Stonewall County. By A. R. Goerdel and Lonnie Watson. 1975. Soil Conservation Service in cooperation with Texas Agricultural Experiment Station. 83 pp., illus.; maps.

May

3–4	*Sierra Club, San Francisco, Calif.*
4–7	*National Forest Products Association, Washington, D.C.*
15–16	*Southern Forest Institute, Inc., Panama City, Fla.*
18–22	*American Institute of Architects, Atlanta, Ga.*
18–23	*National Council of State Garden Clubs, Inc., Salt Lake City, Utah.*
20–23	*International Association on Great Lakes Research, Albany, N.Y.*
29–30	*Southern Forest Institute, Inc., Biloxi, Miss.*

June

1–4	*Twenty-second National Watershed Congress, Portland, Ore.*
8–12	*General Federation of Women's Clubs, Washington, D.C.*
8–13	*American Water Works Association, Minneapolis, Minn.*
15–19	*Air Pollution Control Association, Boston, Mass.*
16–20	*American Geophysical Union, Washington, D.C.*
17–20	*Twelfth National Agricultural Plastics Conference, Vineland, N.J.*
22–25	*Sixty-eighth Annual Meeting of American Society of Agricultural Engineers, Davis, Calif.*
22–25	*National Association of Counties, Honolulu, Hawaii*
23–25	*American Plywood Association, Vancouver, Canada*
24–28	*Association of Consulting Foresters, Greenville, Me.*
26–27	*Southern Forest Institute, Inc., Asheville, N.C.*
29–July 3	*American Seed Trade Association Convention, Houston, Tex.*
30–July 3	*National Environmental Health Association, Minneapolis, Minn.*

July

3–8	*National Education Association, Los Angeles, Calif.*
13–17	*Seventy-fifth Annual Meeting of American Society of Landscape Architects, San Antonio, Tex.*
19–23	*American Association of Nurserymen, Inc., Chicago, Ill.*
20–24	*National Federation of Business and Professional Women's Clubs, Inc. of the USA, Las Vegas, Nev.*

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(continued from p. 21)
LeLand Township of Leelanau County (Peterson Park).

Sewer and water planning for all 13 counties is underway. Farmers Home Administration funds here will bring central water systems and modern, unpolluting sewer facilities to all communities.

Callison emphasized that these will be "special." Being planned on a regional basis, there will be no duplication of effort; plans for one area will be directly applied to others.

The staff of the Northwest RC&D Project includes a forester, Bill Botti, who is working to expand wood using industries. He's facing a task of getting the cooperation of many private owners who are absentee landowners.

Dick Larson and Don Buchanan are the area soil scientists who apply SCS techniques and are creating soil inventory maps of many kinds. They're particularly proud of the cherry site inventory map, for not only did it involve their knowledge, but also required the input of the Cooperative Extension Service, where agents had knowledge of the kind of farm uses presently undertaken, and the weather bureau, to say what potential a site had from that viewpoint.

"I think this will be expanded to many crops," Callison said.

The Northwest RC&D Project, when created, had 577 action proposals. Of those, 519 are now active—in some state of action or completed.

McArthur feels RC&Ds are now being put together slightly differently than many of the early ones. Less emphasis is being placed on individual action proposals and more on identifying needs and opportunities that blend into a central theme and direction for the whole RC&D project. Then with this direction, priority is set by the council on actions to be taken.